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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,533	01/24/2002	Nico N. Raczek	01/017 NUT	2351
7590	06/01/2004		EXAMINER HENDRICKS, KEITH D	
ProPat, L.L.C. 2912 Crosby Road Charlotte, NC 28211-2815			ART UNIT	PAPER NUMBER
			1761	
DATE MAILED: 06/01/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/057,533

Applicant(s)

RACZEK, NICO N.

Examiner

Keith Hendricks

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/13/5/15/1/24/6/24/02</u>  | 6) <input type="checkbox"/> Other: ____                                     |

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-11 are indefinite for the recitation of the phrase "enzyme product." This is not an art-recognized term, such that one skilled in the art would readily and clearly know what is encompassed by this phrase. It is unclear if this is a substrate of an enzyme, a co-enzyme, a reaction product of an enzyme (none of which actually contain an enzyme), or some product containing an enzyme or a portion of an enzyme.

In claim 9, the phrase "producing feedstuffs with a performance improving effect" is indefinite. Initially, it is grammatically confusing ("with a"), and further, it is unclear as to what "effect" is to be "improved." Finally, the term "improved" is a relative term which renders the claim indefinite. The term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 1, 3 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Becker et al. (US PAT 6,190,898).

Becker et al. disclose the production of a crystalline cellulase enzyme, which is produced by adding a salt such as sorbate (sorbic acid) with a cation, to the cellulase in solution. The formed sorbic acid & cellulase combination is useful in many applications, including "in the preparation of a feed additive or in food preparation" (col. 7, lines 23-24). No amounts of sorbic acid within the feedstuffs are provided. Regarding instant claim 10-11, the reference provides "an addition... comprising sorbic acid and at least one enzyme" (claim 10), together in the same feedstuff. Note that, as these two compounds are not technically "separate from one another", instant claim 11 has not been included in this rejection.

Claims 1-2 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 73-007,060 (English abstract provided).

JP '060 provides a feedstuff for silkworms which is prepared by forming a "pellet of the essential components, and dipping it into an" aqueous solution containing such components as vitamins, enzymes, and preservatives. The pellets were dipped into a solution which contained sorbic acid at 0.2 parts/liter by weight, as well as other components including vitamins. Thus, the resultant feedstuff comprises both sorbic acid and enzymes, where the sorbic acid is present in an amount "in the range from > 0.0 to 5.0% by weight", as in instant claim 2. Regarding instant claims 10-11, the reference provides "an addition... comprising sorbic acid and at least one enzyme" (claim 10), both together in the same feedstuff, while being present separately.

Claims 1, 3, 5 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Deyoe (US PAT 3,988,483).

Deyoe et al. disclose the production of liquid starch-urea ruminant feed. At column 7, it is demonstrated that amylase is added to the feedstuff, and also that an acid may be added; among those specifically recited is sorbic acid and phosphoric acid. Although phosphoric acid is demonstrated as used in amounts of from 1%-3.6% by weight of the preparation (Tables VI-VIII), a specific amount of sorbic acid is not provided. Regarding instant claims 10-11, the reference provides "an addition... comprising sorbic acid and at least one enzyme" (claim 10), both together in the same feedstuff, while being present separately.

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Claims 1-2 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Brunner (US PAT 6,350,485).

Brunner teaches compositions for enhancing palatability of pet food. At columns 3-4, the liquid formula which is added to the pet food is described as comprising "about 0.1-1.0 weight % preservatives such as sorbic acid and about 0.1-2.0 weight % enzymes such as protease." Note that, although the enzyme and the sorbic acid are in the composition, they are still technically "separate from one another", as recited in instant claim 11.

Claims 1-3 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by McCauley III (US PAT 5,066,498).

McCauley III teaches nutritional compositions which is added to the feed of domestic farm animals, predominantly horses. The composition comprises from 0- 0.4% preservative (col. 3), and added amylase (col. 4). The recited preservatives include sorbic acid (col. 4). Thus, the instant claims are anticipated by the reference.

Claims 1, 3 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Meschonat et al. (US PAT 6,221,406).

Meschonat et al. disclose enzyme pre-granules for addition to typical granular dry fodder animal feeds. At column 6 it is disclosed that various enzymes may be utilized, including hemicellulase, xylanase, amylase, beta-glucanase, galactomannase, etc. "The enzyme or enzyme mixture ... can be employed in the form of a powder or aqueous solution." "The enzyme or enzyme mixtures can also contain conventional enzyme stabilizers and... preservatives." Specifically recited is that of sodium sorbate. Thus, the instant claims are anticipated by the reference.

Claims 1-3, 5 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Leahy et al. (of record in IDS).

Leahy et al. disclose the addition of alpha-amylase and sorbic acid to feedstuffs for cattle consumption. The sorbic acid is added in an amount of 0.10 %. Thus, the instant claims are anticipated by the reference.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deyoe et al., taken as cited above.

Although a specific amount of sorbic acid used in the feedstuff is not provided in the reference, phosphoric acid is demonstrated as used in amounts of from 1%-3.6% by weight of the preparation (Tables VI-VIII). As stated above, the reference provides for the addition of an acid, and specifically recited a set including sorbic acid and phosphoric acid. Given the teaching of the functional equivalency of the acids, it would have been obvious to one of ordinary skill in the art to have utilized any of the acids recited in the list at column 7 in the same approximate amounts relative to the total feedstuff composition as was done with phosphoric acid. Thus, it would have been obvious for one of ordinary skill in the art to have added sorbic acid in an amount of from 1%-3.6% by weight of the feedstuff preparation.

Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of Becker et al., Deyoe et al., Brunner, or Meschonat et al., each in view of Pais et al. (US PAT 4,482,550).

Each of Becker et al., Deyoe et al., Brunner, or Meschonat et al. are taken as cited above.

Pais et al. disclose the use of titanium as a growth/weight promoter in animal feeds, as well as sorbic acid as a preservative in said feeds (col. 2; claim 3). The general fodder utilized was a commercial chicken fodder (top, col. 3), and was used in the experiments for feeding to chickens, geese, lambs, pigs and cattle.

The utilization of compositions containing both enzymes and sorbic acid, with a typical animal feed composition, was shown by the primary references themselves. The use of these feedstuff compositions for administration to various domesticated animals, such as pigs, cattle, lamb and poultry, would have been obvious to one of ordinary skill in the art to do, given the general state of the art at the time the invention was made, and in light of the specific teachings provided by Pais et al., absent any clear and convincing evidence and/or arguments to the contrary.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Hendricks whose telephone number is (571) 272-1401. The examiner can normally be reached on M-F (8:30am-6pm); First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**KEITH HENDRICKS  
PRIMARY EXAMINER**